

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L550 1756-59860 - Front Differential

Sample No: LH0267591

Oil Type: LIEBHERR GEAR BASIC 90 LS



SAMPLE INFORMATION

| Sample Number | LH0267591 | LH0257962 | LH0198681 | LH0198668 |
|---------------|-------------|-------------|-------------|-------------|
| Sample Date | 06 Dec 2023 | 13 Jul 2023 | 06 May 2022 | 25 Feb 2022 |
| Machine Hours | 9838 | 8893 | 5212 | 4088 |
| Oil Hours | 1000 | 1000 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | ATTENTION | NORMAL | NORMAL | NORMAL |

HOMWOOD DISPOSAL

1501 175TH ST
HOMWOOD, IL
US 60430

Contact: Service Manager



OIL CONDITION

| Visc @ 40°C | cSt | 81.7 | 137 | 134 | 141 |
|-------------|-----|------|-----|-----|-----|
| | | | | | |

T:
F:



CONTAMINATION

| Water | % | NEG | NEG | NEG | NEG |
|-----------|-----|-----|-----|-----|-----|
| Silicon | ppm | 5 | 2 | 3 | 3 |
| Sodium | ppm | <1 | 1 | 2 | 2 |
| Potassium | ppm | 1 | 0 | 3 | 10 |

Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.



WEAR METALS

| | | | | | |
|------------|-----|----|----|----|----|
| Iron | ppm | 60 | 37 | 63 | 73 |
| Copper | ppm | 10 | 13 | 17 | 14 |
| Lead | ppm | <1 | 0 | 0 | 0 |
| Tin | ppm | <1 | <1 | 1 | <1 |
| Aluminum | ppm | <1 | 2 | 1 | <1 |
| Chromium | ppm | <1 | 0 | <1 | <1 |
| Molybdenum | ppm | 5 | 2 | 2 | 2 |
| Nickel | ppm | 0 | 0 | 0 | 0 |
| Titanium | ppm | <1 | <1 | 0 | 0 |
| Silver | ppm | 0 | 0 | <1 | <1 |
| Manganese | ppm | 3 | 1 | 3 | 5 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

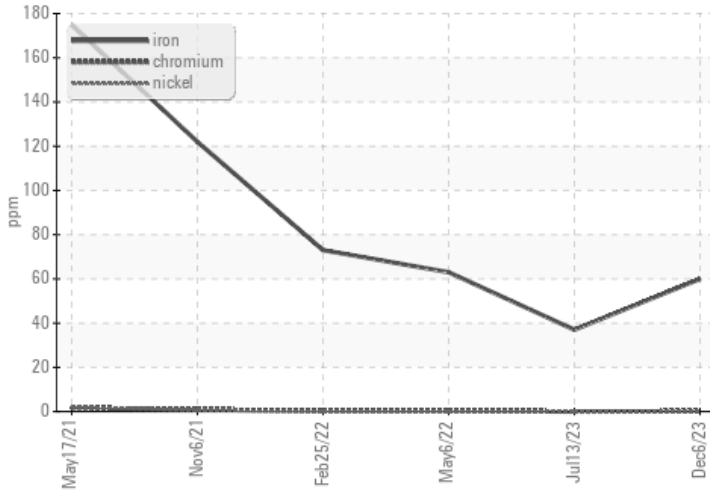
| | | | | | |
|------------|-----|-----|-----|------|------|
| Calcium | ppm | 735 | 17 | 259 | 37 |
| Magnesium | ppm | 352 | 0 | 2 | 3 |
| Zinc | ppm | 482 | <1 | 96 | 8 |
| Phosphorus | ppm | 754 | 597 | 1925 | 1971 |
| Barium | ppm | 0 | 0 | 0 | 0 |
| Boron | ppm | 58 | 25 | 347 | 311 |

Depot: HOMHOMLH
Unique No: 10831881
Signed: Don Baldrige
Report Date: 16 Jan 2024

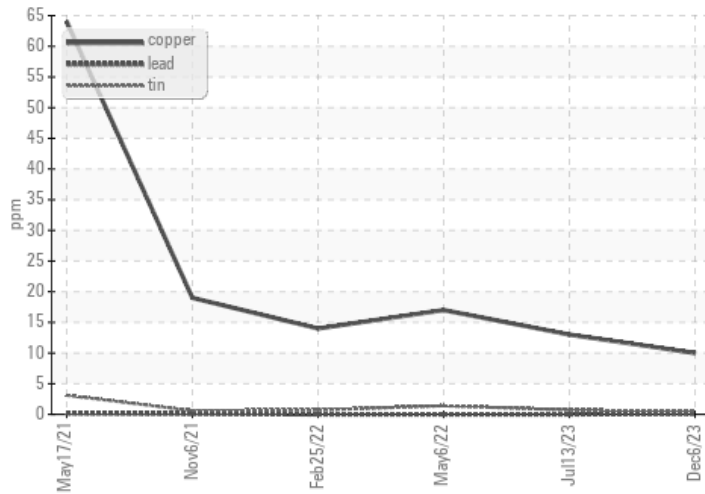


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

